bertrandt
DQ-A / Service UB00068 / FR CLE OOG 0 01
Service incidentologie & industrie e-powertrain / batterie
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Quality Problem Situation

2024-4-19810352-

FROM	Maxime Fourier	CLE
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Theme **HHN - 5DH402**

Cléon, 04/04/2024

Objective To send out technical documentation and elements of analysis about the problem

Expectation To read this document

Orientation NASA **FIC 4-19810352**

■	Product		Design		Other --> /
	Process		Performance		*None --> /*

Reference

VIN/PJI	VF1RHN00571750672	Project	HHN	PWT #	C071918	FIC	4-19810352
Offline date	03/11/2023	Delivery date	07/12/2023	Incident date	16/01/2024	Mileage (km)	1926km
Plant	Palencia	Country	Italy	City	Zeno Naviglio	NITG	E611
Supplier	00278911	DELTA ELECTRONICS THAILAND C		Part Nb	292A01152RTA31440063		

Description of the problem

Customer effect & Context message "système elec à controler" on dashboard

Customer effect
- [x] Duplicated
- [ ] Observed

Physical phenomenon DTC $1AA1-FT$49 Internal_Failure

Probable cause(s) to investigate check for internal failure

Summary and comments

As part of the E-Tech M analyze, we received a PEB for analysis.

SAI analysis :

- *visual inspection :* OK

- *static test :* OK

- *dynamic test :* NOK
customer effect reproduced after less than 30km, message "systeme elec a controler" on dashboard with DTC $1AA1-FT$49 *Internal_Failure* and associated DID $EF01 = 1A *Plausibility between Input current sensor and LLC current sensor* (see P2).

Conclusion :

The DCDC converter **A31440063** is not compliant, part will be sent to the supplier to determine root cause of the failure.

Validation and sharing Validated by S. Lemoine

E. Mougel, S. Lemoine

References

Addition to Customer Effect, context and problem definition

DDT2000 reading faults

Evidences for failure modes and causes

- LBC (HEV)_29b - **RBMS_MCPU_EV2020_300x_50xx_CL_V1.7** Some devices are still under test
- LBC2_29b - **RBMS_SCPU_EV2020_300x_50xx_CL_V1.7** Failures detected
  - CAN from EVC/HEVC Historical Failure
- Superviseur-DCDC_29b - **5DH_DCDC_DELTA_S1S_S1M_v2.1** Failures detected
  - Internal_Failure Current Failure
- (H) EVC-HCM-VCM_29b - **VC1CP010_A201_0920_C1A_HS_V1.1** No failure detected
- HVSG_29bits - **INVHSG_630B_487_V1.1** No failure detected
- INV-ME_29b - **INVME_6306_488_V1.0** No failure detected
- S-GW4 - **C1A-HS_CGW_SW3_DoCAN_v1.0** No failure detected

Data identifier	DataRead.Supplier_Fault_Code	$EF01
Supplier_Fault_Code	1A	
Data identifier	**DataRead.Mileage**	**$F0D0**
Mileage	588226	**588226 km**
Data identifier	**DataRead.DTC_occurrence_counter**	**$F0D1**
DTC_occurrence_counter	3	**3**
Data identifier	**DataRead.DCDC_WaterTemp**	**$0300**
DCDC_WaterTemp	34,3	**34,3 °C**
Data identifier	**DataRead.DCDC_Temp_Normalized**	**$0301**
DCDC_Temp_Normalized	44	**44 %**
Data identifier	**DataRead.DCDC_Input_Voltage**	**$0310**
DCDC_Input_Voltage	361,9	**361,9 V**
Data identifier	**DataRead.DCDC_OutputVoltage1**	**$0311**
DCDC_OutputVoltage1	13,5	**13,5 V**
Data identifier	**DataRead.DCDC_OutputVoltage2**	**$0312**
DCDC_OutputVoltage2	13,51	**13,51 V**
Data identifier	**DataRead.DCDC_Input_Current**	**$0320**
DCDC_Input_Current	4,54	**4,54 A**
Data identifier	**DataRead.DCDC_CAN_Transmitted_OutputCurrent**	**$0321**
DCDC_CAN_Transmitted_OutputCurrent	56	**56 A**
Data identifier	**DataRead.DCDC_CAN_Transmitted_State**	**$0400**
DCDC_CAN_Transmitted_State	2	**Direct**
Data identifier	**DataRead.DCDC_CAN_Received_AbsoluteTimeSince1rstIgnition_HV**	**$F0D2**
DCDC_CAN_Received_AbsoluteTimeSince1rstIgnition_HV	734338	**734338 min**

Monitoring of measurement devices

Device	*Life cycle file*	*Next verif. Date*	*Color Cod.*	>	>	>	>
	>	>	>	>	>	>	>